

# SUMMARY OF GENERAL SPECIFICATIONS FOR TRACK GEOMETRY MEASUREMENT VEHICLE FRA T-2000

## VEHICLE SYSTEM

Type:	Self-Propelled Railcar (Specialized Maintenance Equipment) Compatible with AAR Interchange Rules
Manufacturer:	Plasser & Theurer
Propulsion:	Two (Cummins QSK19-R650) Turbo charged Diesel Engines
Transmissions:	Voith Type T311r Two-Speed Forward & Reverse Automatic with Torque Converter
Acceleration Rate:	0-90 mph in 4 minutes
Trucks:	Plasser High-Speed Trucks; All Axles Driven; 110 mph Gearing; Air & Coil Spring Suspension; Outboard Roller Journal Bearings
Brakes:	Knorr Disk Brakes with ABS; Parking Brake with Manual Override, Capable <b>Service Brake Rate of 2.2 MPHPS and an Emergency Rate of 2.8 MPHPS</b>
Sanders:	All Axles Except Test Axle
Heating:	72 KW Electrical Resistance Heating from AC units and Electric Floor Heat
Air conditioning:	Twelve 1.2-Ton Roof Mounted Air Conditioners
Communications:	Internal Public Address and Cellular Telephone, and (2) 100 Channel Clean Cab Radios. Direct Satellite Communication System, Portable Hand-held radios, Forward Observer's Control Console
Marking Paint Sprayer:	External; DGPS Reporting

## ELECTRICAL

Generators:	Cummins 4BT3.9-G3 Diesel Engine with Stamford 58 KW AC Generator and, 480V alternator
Converter:	7.5 kva UPS Unit
Wayside:	480 V AC, 3 PH
Lighting :	120v, 60 Hz Fluorescent; 24 VDC Emergency Lighting
Batteries:	Six (6) 12 volt (24 volt system)

# **SUMMARY OF GENERAL SPECIFICATIONS FOR TRACK GEOMETRY MEASUREMENT VEHICLE FRA T-2000 (CONTINUED)**

## **DIMENSIONS AND WEIGHTS**

Weight, w/ Fuel	<b>210,000 pounds (105 tons)</b>
Loading Each Axle	<b>26.25 tons</b>
Length Over Pulling Face of Couplers (PFC)	<b>91' 10"</b>
Truck Center Distance	<b>65' 11"</b>
Truck Wheelbase	<b>8' 2½"</b>
Maximum Length Carbody (including plows)	<b>89' 4"</b>
Maximum Width Carbody	<b>10' 0"</b>
Maximum Height - Rail to Top of Air Conditioning Units, New Wheels, Light Car	<b>15' 5 ⅝"</b>
Height, Rail to Top of Finished Floor	<b>53 ⅜"</b>
Wheel Diameter (New)	<b>35 ½"</b>
Fuel Capacity	<b>1050 U.S. gallons</b>

## **ACCOMMODATIONS**

Non-Potable Water:	100-Gallon Tank;
Support Facilities:	Kitchen, Work Bench; Tool Storage Cabinets, Instrumentation Areas
Observation:	Two Large Observation Windows at Each End of Car (3) Monitors
Communications:	Internal Public Address System with External Jacks; Forward Observer's Control Console; Portable 'walkie-talkies'
Safety Equipment:	First Aid Kits; Evacuation Tools; Escape Rope; Fire Extinguishers; Derails; Wheel Chocks; Blue Flags and Lights; Personal Protection (safety vests, eyewear, hard hat, breathing apparatus, steel-toed shoes, <i>etc.</i> ) Equipment
Kitchen:	Microwave Oven; Refrigerator-Freezer (15 cubic feet.); Refrigerator-Freezer (6.3 cubic feet.); Sink.
Seating:	Seating for 16 People (Including Engineer/Pilot): Rear Observation (3); Kitchen (6); Computer Room (3); Forward Area (4)
Toilet Facilities:	Self-Contained Microphor System (Serves 16 People); Lavatory

## **MISCELLANEOUS**

Flammable Stores Locker; Track Illumination Lights, Undercar Instrumentation Lights  
Accommodations: Closets, six lockers